

## **Creating a Sustainable Future: One Citizen at a Time**

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1. General introductory comments
2. I'd like to begin today with an overview of the subjects we're going to explore today. (Read bulleted items and embellish as you see fit.)
3. A lot of people talk about sustainability and sustainable development but what is it?
4. The World Commission on Environment and Development published a book called *Our Common Future* in 1987. In it, they described sustainable development as follows; (Read definition) Ask audience what they think this means.
5. Sustainable development can be thought of as a way of: (Read Bulleted List)
6. Here's another way of thinking about sustainable development.  
Read bulleted items
7. What does it mean when we say that sustainable development is good for people?  
Sustainable development: (read bulleted list)
8. Sustainable is good for the planet... but what do we mean by that?  
When we say sustainable development is good for the planet, we mean that it is a strategy that: (read bulleted items)
9. Sustainable development makes economic sense, too. It is good for the economy...  
By that we mean that it (read list)
10. Sustainable development is a new way of living on the planet and conducting business. Is it really necessary? It is really important to us?  
Why should we proceed along this path?  
What's wrong with what we're doing now?
11. Sustainable development is important for many reasons.  
One reason for its importance is the rapid growth of the human population.  
Growth in the human population is accompanied by a dramatic increase in economic growth, too.  
Economic growth results in an increase in energy consumption  
and an increase in our demand for natural resources, which can affect our environment and our lives adversely.  
Urban growth and its impacts are yet another reason why sustainable development is so important.

12. The increase in human population and economic growth result in many environmental problems that adversely affect our health, natural ecosystems, wild species, and even our economy.  
Some experts believe that these trends even threaten our long-term future.  
Here are some of the potentially costly problems that we're concerned about that sustainable development can address.  
Read bulleted list.
13. It is important to note that environmental problems impact human society in many ways...That is to say, environmental problems have social and economic impacts. For example (Display bulleted list one by one).
14. Like acid rain, global warming which is causing many costly changes. It is changing our climate.  
Climate change is resulting in: (show bulleted list)
15. Sites like this mean devastation to humans, including loss of life and property, with enormous economic implications. Hurricanes can also impact wild species and destroy valuable natural resources such as forests.  
Sustainable development won't eliminate hurricanes, but we may be able to reduce the severity of hurricanes, saving lives, and reducing property damage.
16. Global warming is causing an increase in the intensity and frequency of other types of storms as well. As storms grow more intense and occur in greater frequency, the need for sustainable development becomes clearer.
17. A tornado is one of nature's displays of power, and can bring incredible destruction...Sustainable development can help us reduce the frequency and severity of such events, saving lives and millions of dollars.
18. Sustainable development that relies on energy efficiency and renewable energy and other climate friendly strategies, for instance, can reduce flooding that devastates the lives of many each year...and costs countries billions of dollars in property damage.
19. Climate change affects us in other ways, for example, recurrent droughts and wildfires, which are becoming all too common subjects of the evening news. As the forest burns, we're seeing an increase in fire-fighting costs, increasing premiums for homeowner's insurance, and an increase federal disaster aid, which increase taxes and living expenses.  
Sustainable development can help us save money in many ways, putting our hard-earned money to better use.
20. Not everyone agrees with this assessment of the world situation.  
They doubt that the current course is unsustainable.

Are we on a sustainable course? Can we continue on our current path without catastrophic consequence?

21. Many of us are living well, enjoying the benefits of years of economic growth, but (ask question on the slide)
22. Are we enjoying the good life at the expense of our own future and the future of our children and the millions of species that share this planet with us?  
Ask audience: What are your thoughts?
23. Sustainable development is a way of meeting our needs while ensuring future generations and other species the ability to meet their needs. This requires efforts to protect the environment, but (read question on slide)
24. Read question on the slide
25. Even though we often think of environmental protection as a luxury...perhaps measures designed to protect pretty places for birdwatchers and backpacker...it is not. (Read slide)
26. The Earth and Ecosystems form the infrastructure upon which our society is built. They are sometimes referred to as the biological infrastructure or infra-  
infrastructure of human society.
27. What does it mean when we say that the earth and the environment are the infra-  
infrastructure of human society?  
(Read or paraphrase slides)
28. Here's a graphic from Dan Chiras's environmental science that illustrates the point. As you can see, all of human society depends on the Earth and its ecosystems.
29. How do we create a sustainable future? What steps do we need to take? Can you play a role in this vital activity?
30. Here are some of the guiding principles for our own lives, for business, for all of human society: (read list).
31. On an individual level, we can use energy-efficient light bulbs, like this compact fluorescent light bulb, which uses 75% less energy than a standard incandescent light bulb.  
We can use energy-efficient appliances like on-demand (or tankless) water heaters which heat water as you need it.  
When shopping for new electronics or appliances, look for the Energy Star logo. This ensures you that the product you are looking at is among the most efficient in its category.

32. When shopping for new appliances, urge your parents to study the yellow Energy Guide stickers. They tell you how much energy the appliance uses each year, how much it will cost, and how it compares to others in its category. It is a great shopping tool. (Point out these features on the yellow tag.)  
Even though a more energy- efficient appliance may cost more, the typically use less energy and less water than less-efficient ones. They will save over the long run.
33. Solar energy is a form of renewable energy that can be used to generate electricity, hot water, and heat our homes. It often makes good economic sense and will very likely be one of the major sources of energy in the not-too-distant future.
34. Here's a solar home in Denver that's heated naturally by the sun.  
This home is called a passive solar home.  
Sunlight from the low-angled winter sun enters the building through south-facing windows, heating the home.  
The heat is absorbed by materials in the house and radiates into living spaces at night where it helps tide us over,
35. Straw and earthen plaster are two renewable resources used to build homes. These are two natural building materials that offer many benefits over conventional materials.  
Can you think of them?
36. Here are some more guiding principles we can follow to help build a sustainable future:
37. Creating a sustainable future is all of our responsibility. What can you do?
38. To transport ourselves in ways that protect the Earth and its ecosystems and to build a sustainable future, we can (read bulleted items). How many of you practice these things now?
39. In home, we can (read bulleted list). Do any of you practice these ideas?
40. We can also (read bulleted list). Do any of your families practice these ideas?
41. At home, we can also (read bulleted list).
42. On a personal level we can:
43. Building a sustainable future is going to require efforts by all of us...businesses, governments, and individuals. We're all part of the solution.

44. In closing, I'd like to remind you of a simple fact (read slide).